

**REMARKS****The Office Action**

Claims 1-53 were presented for examination.

All claims stand rejected under 35 U.S.C. 102(g) and 102(f) and 102(e) in view of Myers et al. (6,930,279). The rejection is further based on a double-patenting rejection, also in view of Myers et al. (6,930,279).

The Examiner identifies Church et al. (6,023,037), Furudate (4,634,830) and Kooken (5,991,169) as art showing welding power supplies wherein power factor is a consideration in the design of the supply.

In the Office Action it is advised that the document S.N. 10/626,776 in the IDS of September 8, 2003 was not considered as it was unrelated to the present application, and was apparently the result of a typographical error. Applicant appreciates the examiner's identification of this error, which has now been corrected in the application. More particularly, the actual application number is 10/626,919, now U.S. Patent No. 6,930,279, cited in the most recent Office Action.

**All Claims Remaining in the Application are now in Proper Form and are Distinguished From the Cited Art**

Applicants have now amended independent claims 1, 19, 36, 39, 45 and 48 to more particularly note the present concepts are instituted in an arc welder having two modes of operation, including a voltage regulating mode and a voltage non-regulating mode. It is now more clearly shown that when in the voltage regulating mode (*i.e.*, where the arc voltage is constant at various levels of arc current), for example, a program is provided to regulate the voltage by a computer algorithm such that the voltage may change when there is a change in other dynamics of the welding operation. On the other hand, in the non-regulated voltage mode, details are provided as to the welder including a program to calculate the realtime power factor of the weld current and weld voltage to permit for an adjustment of a background or peak current in order to maintain the power factor at a given desired level.

Applicants respectfully submit these amendments distinguish the present claims over the cited Myers et al. '279 patent. Particularly, Myers et al. does not particularly disclose the operation of the welder in the mode of voltage regulated and non-voltage

regulated, wherein separate operational procedures are provided in the non-regulated mode to maintain a desired power factor, and for operation in a voltage regulated mode whereby control of the arc voltage is undertaken.

In the Office Action the Examiner has also made inquiry as to which inventor is the inventor of the prior conflicting subject matter under the rejection set forth in the Office Action. Applicants respectfully submit the inventors of the presently amended claims are as set forth in the present application. It is submitted the amendments to the claims clarify and obviate the issue as to inventorship raised in the Office Action.

It is respectfully submitted the above amendments address the Examiner's rejections, and the claims as now set forth are distinguished from the cited art.

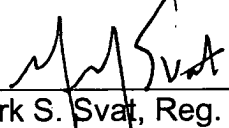
**CONCLUSION**

For the reasons detailed above, it is respectfully submitted all claims (1-4, 7-14, 17-22, 25-31, 34-53 and 92-99) remaining in the application are now in condition for allowance. An early notice to that effect is therefore earnestly solicited.

Respectfully submitted,

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MINNICH & McKEE, LLP

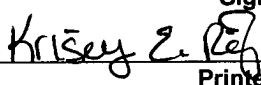
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**CERTIFICATE OF MAILING**

Under 37 C.F.R. § 1.8, I certify that this Amendment is being

- ☒ deposited with the United States Postal Service as First Class mail, addressed to: MAIL STOP AMENDMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.
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<b>Date</b> <b>December 27, 2005</b>	<b>Printed Name</b> <b>Krisey E. Riley</b>